



Sportsmanlike conduct. Organizers are working to protect the environment at the site of the Olympic Winter Games of 2002.

runoff from nonpoint source pollution.”

The Atlanta Bicycle Campaign (ABC) is also taking measures to help control air pollution during the games by encouraging the use of bicycles for transportation. ACOG and the city of Atlanta are helping the group with publicity and parking, and ABC will staff the bicycle parking lots. “Our goal is to provide access to the Olympics by bicycle,” said Dennis Hoffarth, director of ABC’s Olympic Bicycle Access Project. “Atlanta already has a severe air pollution problem, and this campaign will help with pollution control.

Salt Lake City is also facing the challenge of protecting the environment when it hosts the Winter Olympics in 2002. “The environment has always been a contentious issue [here] because the small mountains around the city contain delicate watersheds,” said John Hoagland, a winter sports and resorts specialist for the U.S. Forest Service, and a member of the Environmental Advisory Committee of the Salt Lake Olympic Organizing Committee.

During preliminary planning, the organizing committee selected two major canyons outside the city to serve as ski venues, but environmental groups protested and the committee withdrew the proposal. “Withdrawing the venues from those canyons calmed down the environmental community,” Hoagland said. “Now the community is more supportive of the Olympics.”

The organizing committee is cooperating with environmental groups through representatives on the advisory committee. A preliminary environmental platform is now in place in which the organizing committee says it “intends to carry on and improve on the environmental progress initiated in Lillehammer.” Plans include requiring contractors to guarantee that the environment will be restored after the games, ensuring that cultural events such as the opening ceremony have an environmental theme or message,

educating students and the community on the importance of a healthy environment to human health, mandating that spectators use mass transit, and contracting with green vendors and green hotels. “The city has always been sensitive to the environment,” Hoagland said, “and Lillehammer cranked up the heat a little bit.”

Airing the Word on Pollution

The American Medical Association (AMA) passed a policy resolution in December 1995 urging its members to help spread the word to health care colleagues, patients, and the public about the negative health effects of indoor and outdoor air pollution. The resolution was proposed by the National Association of Physicians for the Environment (NAPE), which sponsored a conference on 18 November 1994 to examine the impact of air pollution on body organs and systems.

“It is important that people understand that air pollution can affect not only the lungs, but virtually every organ and system in the body,” said John Kimball Scott, an otolaryngologist and president-elect of NAPE, who served as floor manager of the AMA resolution, in a press release announcing its passage.

According to the conference summary, published 20 September 1995, air pollutants can enter the body through various ways—not just by inhalation. They can be absorbed through the skin or ingested by eating food or drinking water that has been contaminated, possibly through bioaccumulation in the food chain. The pollutants in food and water that humans and animals are most likely to be exposed to include pesticides, PCBs, dioxin, and heavy metals such as cadmium, lead, and mercury, says the report. Such pollutants can cause a variety of adverse health effects including respiratory ailments, damage to the blood system leading to anemia or leukemia, heart disease, including hypertension and cardiac arrhythmias, and damage to the urogenital system resulting in kidney disease, bladder cancer, and reproductive problems. In addition, the skeletal system stores heavy metals such as lead that may accumulate over time. During times of bone loss such as pregnancy, lactation, or osteoporosis, the stored toxins may be released back into the body causing health problems, especially in women, newborn children, and senior citizens.

Air pollutants can also cause immune suppression or overstimulate the immune response, which can lead to allergies and immune-mediated diseases. Air pollutants

have also been linked to psychological disorders and toxic damage to the nervous system and the brain, especially in developing fetuses or young children. In addition, air pollutants are thought to have detrimental effects on the reproductive and endocrine systems, but according to the conference summary, these effects require more research to be fully understood. The report points out that certain populations, including children, the elderly, and minorities, are at a higher risk of being affected by air pollutants.

Not only should people be concerned about the direct impact of air pollution on human health, says the report, but they should also be concerned about the adverse effects of air pollution on plants, animals, and ecosystem functions, which affect agriculture, fishing, wildlife, tourism, and recreation. “Human health is inseparable from the health of the natural world,” says the report.

The report emphasizes the need for more research and public education on the consequences of air pollution. “There is no question that air pollution can be a serious public health hazard and that prevention of air pollution will lead to disease prevention,” says the report.

A Knock-out for NSAIDs

Every year millions of Americans take aspirin and other drugs such as ibuprofen and naproxen for relief of headaches and other minor aches and pains, for chronic pain relief of arthritis, and as a preventive against colon cancer and heart attacks. Referred to collectively as nonsteroidal antiinflammatory drugs (NSAIDs), they are the most widely used drugs in human medicine.

Most people who take NSAIDs do not experience severe side effects, although in some people, especially those taking the drugs chronically, NSAIDs can cause stomach ulcers and irritate the stomach’s lining. NSAIDs that retain their positive benefits and do not cause adverse side effects could significantly benefit the individuals taking them.

Collaborative research by investigators at the NIEHS and the University of North Carolina at Chapel Hill (UNC-CH), has produced two strains of transgenic mice that may lead to better NSAID development. The mice should help scientists obtain a clearer idea of how NSAIDs work. “The importance of this research goes beyond aspirin/NSAIDs,” said Robert Langenbach, a microbiologist at the NIEHS who, with other investigators, developed one of the mouse strains. “It may lead to better treatments and prevention of